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ABSTRACT

From its earliest origins, career counseling has had as one of its major goals the amelioration of occupational indecision. Despite evidence of the general success of both individual and group career counseling in ameliorating indecision, it is likely that there is a segment of undecided individuals for whom essentially rational, information-oriented interventions are unhelpful. These individuals may have debilitating negative personal attitudes and characteristics, or internal barriers, which prevent them from using information about themselves and the environment to make good decisions. Accurate, useful assessments of internal barriers to career decision-making are needed if practitioners are to provide the most effective form of career counseling for their clients. In this exploratory study, 216 undergraduate students who were enrolled in a career planning course and had scored as being low in vocational identity on the Identity Scale were assessed. Three relatively new diagnostic inventories were used: the Career Planning Confidence Scale, the Goal Instability Scale, and the Career Factors Inventory. Analyses of the diagnostic measures revealed that low levels of self-esteem, low confidence in readiness for career planning and low confidence in the ability to do self-assessment, as well as high levels of career choice anxiety, need for self-knowledge, and goal instability offered the greatest diagnostic potential for predicting lack of success in the course. (ABL)

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# Identifying Critical Internal Barriers to Effective Career Decision-Making Among College Students

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Abstract

Accurate, useful assessments of internal barriers to career decision-making are needed if practitioners are to provide the most effective form of career counseling for their clients. In this exploratory study, 216 undergraduates who enrolled in a career planning course were assessed by means of three relatively new diagnostic inventories: the Career Planning Confidence Scale, the Goal Instability Scale, and the Career Factors Inventory. Analyses of the diagnostic measures revealed that low levels of self-esteem, low confidence in readiness for career planning and low confidence in the ability to do self-assessment, as well as high levels of career choice anxiety, need for self-knowledge, and goal instability offered the greatest diagnostic potential for predicting lack of success in the course. More in-depth interventions related to self-concept change are recommended for students with these barriers.

# Identifying Critical Internal Barriers to Effective Career Decision-Making Among College Students

From its earliest origins, career counseling has had as one of its major goals the amelioration of occupational indecision. Toward this end, counselors have helped clients to acquire information about themselves and about occupations and have taught rational strategies for decision-making (Brooks, 1984; Herr & Cramer, 1988; Powell & Kirts, 1980). This approach has seemed to be warranted, as the great majority of individuals appear to experience simple undecidedness due to information deficits or developmental "unreadiness" (Crites, 1969; Holland & Holland, 1977; Salomone, 1982; Savickas, 1989).

Despite evidence of the general success of both individual and group career counseling in ameliorating indecision (Oliver & Spokane, 1988), it is likely that there is a segment of undecided individuals for whom essentially rational, information-oriented interventions are unhelpful. These individuals may have debilitating negative personal attitudes and characteristics, or internal barriers, which prevent them from using information about themselves and the environment to make good decisions. These internal barriers have been described in such terms as "decision anxiety" (Mendonca & Siess, 1976); "low self-confidence" and "little tolerance for ambiguity" (Holland & Holland, 1977); and "self-criticalness", "submissiveness", "passivity", and the "need

for approval" (Cooper, Fuqua, & Hartman, 1984). Estimates of the percentage of these individuals among the undecided population range from 13% (Fuqua, Blum, & Hartman, 1988) to 25% (Holland & Holland, 1977).

The existence of a significant percentage of the undecided population who exhibit such impediments to career decision-making has important implications for career intervention. Specifically, it seems unwise to offer only general, information-oriented treatments to all students, regardless of the reason for indecision. Both Fretz (1981) and Oliver and Spokane (1988), in their reviews of career intervention outcomes, warn of the "client uniformity hypothesis", in which all clients are treated similarly. As a first step toward addressing the varying needs of undecided clients, Oliver and Spokane call for the development of improved diagnostic procedures in career counseling.

Methods for assessing internal barriers to career decision-making have emerged in recent years in the form of instruments which represent a number of different theoretical perspectives. Some of the promising constructs which are measured by these instruments include "low career decision-making self-efficacy" (Taylor & Betz, 1983), from the cognitive-behavioral perspective; "goal instability" (Robbins & Patton, 1985), from a psychodynamic context; and "choice anxiety", "generalized indecisiveness", "need for self-knowledge", and "need for information" (Chartrand, Robbins, Morrill, & Boggs, 1990), which have been empirically,

rather than theoretically, derived. At this relatively new phase of our knowledge of career indecision diagnosis, it would be valuable for the relationships among these constructs to be determined, in order that a more parsimonious diagnostic scheme might emerge. In Oliver and Spokane's (1988) words, "Studies using diagnostic procedures are needed. Standardized diagnostic instruments are...required" (p. 459).

Until now, the process of identifying possible characteristics of undecided individuals has generally relied on factor analysis (e.g., Osipow, Carney, & Barak, 1976; Schulenberg, Shimizu, Vondracek, & Hostetler, 1988) and cluster analysis (Fuqua, Blum, & Hartman, 1988; Larson, Heppner, Ham, & Dugan, 1988). No studies were found which attempted to diagnose individuals as a result of their failure to benefit from traditional career interventions. Such an exploration of the relationship between specific barriers and career intervention outcomes is called for, in that it would clarify the power of these barriers to interfere with information-oriented career counseling, and therefore make the urgency of providing alternate interventions clearer. Additionally, such exploratory research might further validate the potency of selected diagnostic constructs by identifying those which interfere with career counseling benefits. Consequently, a smaller, potentially more powerful set of diagnostic constructs might be used by practitioners in order to identify students who are unlikely to benefit from traditional career interventions. Such findings might

provide practitioners with standardized diagnostic instruments which could be applied early in the intervention process. Subsequently, specialized, targeted interventions might be directed at those individuals identified by the diagnostic instruments.

The purpose of this exploratory investigation was to identify the most potent internal barriers to receiving assistance from a college career planning course by comparing participants' post-course outcome with their performance on pre-course diagnostic measures.

## Method

### Participants

Data were collected on 260 college students at a public university in the southeastern United States who selected 1 of 12 sections of a one-credit course in Career Planning. There were, on the average, 22 students in each section, with a range of 17 to 29. The students were either self-selected or advised to register for the course by their academic advisor.

### Instruments

Four instruments were used in the investigation, three as diagnostic measures and one as an outcome measure. The Career Planning Confidence Scale (CPCS) (Pickering, Calliotte, & McAuliffe, 1989), the Goal Instability Scale (GIS) (Robbins & Patton, 1985), and the Career Factors Inventory (CFI) (Chartrand et al., 1990) were chosen as the diagnostic measures. The Identity Scale (IS), which is part of My Vocational Situation (Holland,

Daiger, & Power, 1980) was chosen as the outcome measure. The diagnostic measures were selected after a review of the literature as being representative of recent assessment developments in career counseling and as varying among themselves in their content and in their theoretical bases. The outcome measure was selected because the IS measured the major goals of the course and because it is considered to be a valid and widely accepted measure of career planning course outcomes.

Diagnostic Instruments

Career Planning Confidence Scale (CPCS) (Pickering, et al. 1989). The CPCS is a 46-item experimental measure of "career self-efficacy." The CPCS is based on social cognitive theory, more specifically on Bandura's (1977, 1986) notion of self-efficacy. Self-efficacy can be defined as individuals' confidence in their ability to successfully perform certain behaviors. In the case of the CPCS, self-efficacy is focused on the specific tasks and behaviors required to make effective career decisions. This instrument was designed so that specific factors in career decision-making self-efficacy might be assessed. Through the CPCS students are asked to rate their confidence in their ability to perform each of 46 career decision-making tasks on a scale of one (not at all confident) to five (completely confident).

Originally, 51 items comprising 9 scales were developed by Pickering et al. (1989) based on career decision making models (Gelatt, Varenhorst, Carey, & Miller, 1973; Katz, Norris, & Pears,

1977; Krumboltz & Baker, 1973). However, the CPCS was reduced to 46 items and five scales using factor analysis. The five scales were labeled Readiness Confidence, Self-Assessment Confidence, Information-Seeking Confidence, Deciding Confidence, and Implementation Confidence. The CPCS showed internal consistency reliability (Cronbach's alpha) which ranged from $\underline{\alpha}$ = 0.81 for Readiness Confidence to $\underline{\alpha}$ = 0.92 for Implementation Confidence. Internal consistency for all 46 items was $\underline{\alpha}$ = 0.96. The five scales of the CPCS have shown significant correlations with self-esteem (ranging from $\underline{r}$ = 0.33 to $\underline{r}$ = 0.48), generalized indecisiveness (ranging from $\underline{r}$ = -0.36 to $\underline{r}$ = -0.51), vocational identity (ranging from $\underline{r}$ = 0.30 to $\underline{r}$ = 0.47) and goal instability (ranging from $\underline{r}$ = -0.35 to $\underline{r}$ = -0.46).

Goal Instability Scale (GIS) (Robbins & Patton, 1985). The GIS is based on a perspective which stems from the psychodynamic tradition. The instrument consists of 10 items which are rated on a one (strongly agree) to six (strongly disagree) scale. High scores on the GIS indicate a high degree of goal directedness and low scores are indicative of goal instability. Goal instability can be defined as the absence of an internalized goal orientation, as described by Heinz Kohut's (1977) "psychology of the self." Kohut has described the self as developing along two lines: "grandiosity" and "idealization". For the development of the GIS, the idealizing line was most relevant, as it has direct career implications. In Kohut's formulation, the individual who develops

a mature self in the idealizing line should be able to appraise talents and skills realistically and have the ambition or energy to implement actions that are founded on that accurate self-appraisal (Robbins & Patton, 1985). In contrast, if there is disturbance in the development of the idealizing sector of the self, the individual will experience poor self-esteem, career indecision, and difficulty in beginning projects (Robbins, 1987). Robbins and Patton (1985) have suggested that this phenomenon, which they call "goal instability", is an explanation for indecisiveness.

Items on the GIS were created by use of a rational process. Factor analysis then revealed one factor composed of 10 items (Robbins & Patton, 1985). The GIS has a test-retest reliability of $\underline{r} = 0.76$ and internal consistency of $\underline{\alpha} = 0.81$ (Robbins & Patton, 1985). Evidence of the validity of the GIS includes relationships found between goal instability and undifferentiated interest patterns, social withdrawal, low self-esteem, depressive style, and lack of ambition and goals (Robbins, 1985, 1989; Robbins & Patton, 1985).

Career Factors Inventory (CFI) (Chartrand, et al. 1990). The CFI is a 31-item, multidimensional measure of career indecision. The CFI contains five scales, three of which purport to assess personal-emotional factors (Career Choice Anxiety, Generalized Indecisiveness, and Self-Esteem) and two of which purport to assess information factors (Need for Career Information and Need for Self-Knowledge). Chartrand et al. (1990) defined these terms in the

following ways. Career Choice Anxiety was the anxiety attached to the vocational decision-making process. Generalized Indecisiveness was the inability to make decisions even when the necessary conditions to do so were present. Self-Esteem was defined as the characteristic evaluation of self. Need for Career Information and Need for Self-Knowledge were defined, respectively, as the need to acquire factual data and experience concerning various occupations prior to making vocational commitments and a person's need for self-definition and self-discovery.

Items for the CFI were chosen using a rational method and were reduced to 31 items using factor analysis. Chartrand et al. (1990) reported test-retest reliability across scales ranging from $\underline{r}$ = 0.79 to $\underline{r}$ = 0.84 and internal consistency ranging from $\underline{\alpha}$ = 0.73 to $\underline{\alpha}$ = 0.86 for each scale. Construct validity of the scales was demonstrated, with career choice anxiety correlating highest with trait anxiety ($\underline{r}$ = 0.32), generalized indecisiveness with goal instability ($\underline{r}$ = 0.43) and need for self-knowledge with vocational identity ($\underline{r}$ = 0.40). The CFI scales also clearly discriminated between low and high career decidedness groups, correctly predicting 85% of the cases.

Outcome Measure

Identity Scale (IS) (Holland et al., 1980). The IS was used as the course outcome measure. The IS is an 18-item, true-false measure of Vocational Identity, which is defined as "possession of a clear and stable picture of one's goals, interests, and talents"

(Holland, Gottfredson, & Power, 1980, p. 1191). Holland et al. reported a KR-20 reliability ranging from $\underline{\alpha}$ = 0.86 to $\underline{\alpha}$ = 0.89. Validity was ascertained by finding low vocational identity to be associated with passive, dependent behavior and vaguely defined goals. Other researchers have found vocational identity to be related in expected ways to occupational commitment (Grotevant & Thorbecke, 1982), social adjustment and positive academic attitudes (Graef, Wells, Hyland, & Muchinsky, 1985), ego identity and level of career development (Savickas, 1985), and sense of well-being (Henkels, Spokane, & Hoffman, 1981). Slaney (1988) noted, in his review of the literature on the Vocational Identity construct, that the IS scale may be a measure both of career indecision and of general adjustment, as Holland et al. (1980) have proposed.

In regard to its use as a treatment outcome measure, the IS items assess the central goals of the course, which are increased self-knowledge about career-related interests and abilities, increased occupational information and increased certainty about career plans. Additionally , the IS has demonstrated responsiveness to interventions (MacKinnon-Slaney 1986; Rayman, Bernard, Holland, & Barnett 1983; Slaney & Lewis 1986).

Since one of the items, which refers to knowing "what occupation I have wanted to follow for less than one year," consistently moved in the opposite direction of the others when the IS was used in previous unpublished pre-post studies by one of the authors (Calliotte, 1985), it was removed from this analysis.

Thus, all analyses in this study were based on a 17-item version of the IS, which should reflect more accurately any positive change which might occur as a result of the intervention.

## Procedure

The three diagnostic instruments were administered along with the IS to all students (N = 260) between the first and second class meetings. The IS was administered again prior to the last class meeting. The process was repeated during both semesters of the study.

## Intervention

The intervention consisted of a graded, 15 hour, one-credit course in Career Planning. The instructors were Master's-level counselors in a university academic advising center. A common syllabus was used and the instructors consulted regularly in order to ensure uniformity of course content. Major topics covered in all sections were: self-assessment of values, abilities, and interest; exploration of Holland code-occupational match; occupational exploration; and decision-making strategies. Students were required to complete one informational interview and to research at least three occupations. As part of the course they completed the Self-Directed Search (Holland, 1985) and they worked on the DISCOVER (Rayman & Bowlsbey, 1977) computerized career guidance program.

## Data Analysis

The data analysis proceeded through two steps. First, a score

of nine or below on the IS was chosen as the cutoff score for low vocational identity, both in the pretest and posttest administrations. Support for this score as an appropriate level for students to be classified as undecided and thus included in the study came from the research of Lucas, Gysbers, Bueschner, and Heppner (1988) who found that university freshmen averaged 9.9 and 9.8, for males and females respectively, on the IS. Based on these data, 216 students (out of 260 who enrolled) with scores of nine or below were judged as being low on vocational identity and became the subjects for this study.

In order to parallel the pretest score of nine as an indicator of career indecision, this same score was again chosen as the posttest designation of those who were not sufficiently helped by the course. In addition to being below the average for Lucas et al.'s (1988) sample of college freshmen, this score fell below the mean of 9.52 on the IS in a study of students who had completed a college career planning course (Rayman, et al., 1983). The score of nine also helped to avoid a Type I error, as it was considered to be a conservative estimate of not being helped by the course and would thus underestimate the power of the diagnostic measures. Many of those who scored nine or below may, in fact, have made some progress in the course but still have not reached a satisfactory level of vocational identity upon completion.

In the second step of the analysis the low post-test vocational identity group (IS <= 9) and the high post-test

vocational identity group (IS > 9) were compared across all of the pre-intervention diagnostic scales using ANOVA. Initially, ANOCOVA was performed to determine whether or not there were any significant effects due to race and gender. The Student-Newman-Keuls (SNK) post hoc comparison was used to identify those scales on which the low and high vocational identity groups differed significantly. Those scales which met the above criteria were considered to be potential barriers to career decision-making. A stringent level of significance ($p < .01$) was used in all analyses in order to offset the problems associated with multiple significance tests and in order to identify only the most important barriers.

## Results

A total of 216 students with scores of 9 or below on the pretest IS completed both the pretest and posttest instruments and presented useable data. Of the 216 students, 64% were female, 22% percent were black, and 71% were white. The average age was 20 years old. Finally, the vast majority (92%) passed the Career Planning Course with an A (59%), B (25%), or C (8%).

As no significant effects were found using ANOCOVA, race and gender were removed from the analysis and ANOVA was used. ANOVA results indicated that 6 of the 11 scales included on the three diagnostic instruments were barriers to career decision making (Table 1). Goal Instability from the GIS was identified as a barrier ($F = 23.33$, $p = 0.0001$) as were two scales from the CPCS:

Readiness Confidence ($F$ = 9.31, $p$ = 0.0026) and Self-Assessment Confidence ($F$ = 9.31, $P$ = 0.0026). From the CFI, Self-Esteem ($F$ = 10.83, $p$ = 0.0012), Career Choice Anxiety ($F$ = 16.40, $p$ = 0.0001), and Need for Self-Knowledge ($F$ = 17.19, $p$ = 0.0001) were identified as barriers. Therefore, as indicated by the means in Table 1, low levels of Readiness Confidence, Self-Assessment Confidence, and Self-Esteem mediated against high vocational identity as did high levels of Goal Instability, Career Choice Anxiety, and Need for Self-Knowledge.

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Insert Table 1 about here

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## Discussion

This research has attempted to determine the internal barriers which mitigate against achieving higher levels of vocational identity which might otherwise accrue from participation in a traditional career planning course. The constructs which revealed the greatest potential for identifying students who remained weak in vocational identity were lower self-esteem, a perceived lack of self-knowledge, and higher levels of anxiety around career choices (all from the CFI); a lower level of goal directedness (from the GIS); and lower levels of confidence in readiness to make a career decision and in the capability to adequately engage in self-assessment (from the CPCS). These internal barriers appear to deter students from making satisfactory progress in career

decision-making through the career class.

The lower level of confidence in readiness to make a career decision may be related to the lack of self-esteem and self-information which lead to a lack of goal directedness. These individuals also lack the belief that they can successfully discover the self-information they need to make effective career decisions which in turn may reinforce the level of anxiety they feel about the career decision-making process.

It is possible to view all of these scales, taken together, as indicators of a negative or undifferentiated self-concept. As described by Super, Starishevsky, Matlin, and Jordaan (1963), the self-concept is the constellation of personal constructs that individuals have about themselves and the world. These measures may indicate a fundamental dissatisfaction with and/or uncertainty about who one is and one's relation to work roles. With a confident, clear understanding of themselves and their relationship to the world, based on developmental experiences, individuals can integrate information into long- and short-term plans with some confidence. In contrast, for individuals whose expectations and cognitive schemata (Peterson, Sampson & Reardon, 1991) are negative about their relationship to the world of work, self- and occupational information may not be useful.

Consistent with this formulation, Cabral and Salomone (1990) recently found that well-developed self-concepts enabled individuals to process unforeseen information. Conversely, they

indicated that such information could be confusing to persons with negative schemata about their occupational potentials. The "search for consistency", or the tendency to assimilate incoming information into available, pre-existing knowledge structures (Guidano & Liotti, 1985), may explain the rejection of information by individuals with the internal barriers represented by the six scales. This may be precisely what happens with the extensive information on self and occupations provided to such students through a typical career course. All six of the significant scales point to the need to help individuals to identify their dysfunctional beliefs and subsequently to accommodate to new information, i.e., to develop schemata which allow for more or clearer future possibilities.

## Future Research

Further research is needed in at least three major areas. First, criterion scores on the above assessment instruments for identifying sub-groups of students might be determined. These scores would enable practitioners to place students into differential treatment groups designed to ameliorate their internal barriers. Second, sub-groups of indecision types might be identified by cluster analysis (Borgen & Weiss, 1971) of students who are unsuccessful in career courses. In the present exploratory study, only broad indicators of the nature of indecision were identified. Within the targeted group there are likely to be individuals and subgroups with quite different concerns. Finally,

while much is known about the outcomes of career interventions in general (Spokane & Oliver, 1983), very little is known about the influence of different elements in diverse career interventions (Holland, Magoon, & Spokane, 1981; Lent & Hackett, 1987). In this vein, actual differential interventions should be studied in order to further elucidate client attribute-treatment interactions. Specifically, information-oriented interventions might be compared with those which additionally address internal barriers to career decision-making either within the class or individually as an adjunct to it.

## Conclusion

The extent and nature of barriers to career decision-making for students who enroll in a career class were explored in this investigation. Given that 51% of students at the end of this class still showed a level of vocational identity that was below that of the average college freshman, it behooves the practitioner to consider differential interventions for those who do not seem to be sufficiently helped. Those who continued to exhibit low levels of vocational identity at the end of the class initially exhibited the barriers of low self-esteem, high need for self-knowledge, high career choice anxiety, high goal instability, and low self-efficacy about readiness to engage in the career decision-making process and about their ability to do self-assessment. Specialized group treatments or supplemental one-to-one counseling (e.g. McAuliffe, 1991) which target these barriers seem warranted for those who

initially demonstrate these internal barriers to career decision-making.

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## Author Notes

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Table 1

ANOVA Results for the Effect of the Low Post-test IS and High Post-test IS Groups on the Pretest Diagnostic Scales

| Pretest | IS <= 9 M/SD/n | IS > 9 M/SD/n | F | p |
|---|---|---|---|---|
| GOAL INSTABILITY SCALE | | | | |
| Goal Instability | 35.3<br>7.4<br>106 | 40.8<br>9.2<br>104 | 23.33 | 0.0001 * |
| CAREER CONFIDENCE SCALES | | | | |
| Readiness Confidence | 9.4<br>2.4<br>108 | 10.3<br>2.4<br>104 | 7.26 | 0.0076 * |
| Self-Assessment Confidence | 29.3<br>6.9<br>108 | 32.2<br>6.9<br>103 | 9.31 | 0.0026 * |
| Information Seeking Confidence | 24.9<br>5.7<br>108 | 26.5<br>6.0<br>104 | 4.01 | 0.0466 |
| Deciding Confidence | 28.9<br>6.7<br>107 | 31.2<br>6.9<br>104 | 6.04 | 0.0148 |
| Implementation Confidence | 34.1<br>7.7<br>106 | 35.4<br>8.6<br>104 | 1.37 | 0.2431 |
| CAREER FACTORS INVENTORY | | | | |
| Self-Esteem | 20.1<br>4.4<br>108 | 22.0<br>4.2<br>100 | 10.83 | 0.0012 * |
| Career Choice Anxiety | 20.2<br>3.7<br>109 | 18.0<br>4.3<br>103 | 16.40 | 0.0001 * |
| Need for Information | 26.7<br>4.0<br>107 | 26.1<br>4.4<br>96 | 1.15 | 0.2848 |

Table 1 continued

| Pretest | IS <= 9 M/SD/n | IS > 9 M/SD/n | F | p |
|---|---|---|---|---|
| CAREER FACTORS INVENTORY continued | | | | |
| Generalized Indecisiveness | 22.9<br>5.1<br>109 | 21.0<br>5.6<br>102 | 6.36 | 0.0124 |
| Need for Self-Knowledge | 17.7<br>4.1<br>109 | 15.3<br>4.6<br>102 | 17.19 | 0.0001 * |

* $p<.01$.